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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,741	07/24/2003	Rory Matthew Mitchell	ACE-17432	8049
10361	7590	03/18/2005	EXAMINER	
ANTONY C. EDWARDS SUITE 800 - 1708 DOLPHIN AVENUE KELOWNA, BC V1Y 9S4 CANADA			SELF, SHELLEY M	
			ART UNIT	PAPER NUMBER
			3725	

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/625,741	Applicant(s) MITCHELL ET AL. <span style="float: right;">68</span>	
	Examiner Shelley Self	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-17, 21 and 23-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-14, 21, 23-25, 27, 31, 32 and 34 is/are rejected.
- 7) ☒ Claim(s) 15-17, 26, 28-30 and 33 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/16/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election without traverse of the invention of Group II (clms. 9-17,21,23-34) in the reply filed on January 21, 2005 is acknowledged.

Claims 1-8, 18, 20 and 22 have been cancelled by Applicant's response filed January 21, 2005.

### *Drawings*

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the *array of circular saws* (clm. 10), *common shaft* (clm. 10), *gang saw* (clms. 12, 13, 21, 24-26, 31, 33) and *support frame* (clm. 13) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Additionally, the drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 32, 34, 35 & 36.

Further, The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "14" and "14a" have both been used to designate "sides of the cant" (pg. 8, line 14; pg. 9, line 14 respectively).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing

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should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

The disclosure is objected to because of the following informalities:

Page 1, lines 5-15, patent numbers have not been included. Corresponding patent serial numbers are required for corresponding applications patented, i.e.; --...09/505,255, *Now US.*

*Patent No. 6,520,228..--*

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 11-14, 21 and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

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applicant regards as the invention. With regard to claim 11, it is unclear how the pivot axis can be located below the path and intercept the path. Clarification is required.

Claims 12, 13 and 21 recite the limitation "*said gang saw*". There is insufficient antecedent basis for this limitation in the claim. It is not clear as to whether the cutting tool is a gang saw or if the gang saw and cutting tool are separate elements of the claimed invention. Clarification is required.

Regarding claim 14, there is no antecedent basis for "*said sawing station*", it is not clear whether said sawing station is the same as the cutting station or if these two elements are separate. Correction is required.

With regard to claims 12-14 and 21 for the purposes of examination, the cutting station is understood to be a sawing station, and the sawing station to include a gang saw.

With regard to claim 31, it is not clear what "a base" refers to, i.e. base of what, conveyor, chipping heads, cutting station, etc... Clarification is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-11, 14, 23, 24, 27 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowlin et al. (4,879,659) in view of Stroud (4,947,909). With regard to

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claims 9 and 34, Bowlin discloses an apparatus for sawing a work piece into parts of desired dimensions comprising: a transport conveyor (36) for moving the work piece (30) along a path (figs. 13, 14) through a plurality of station; said plurality of stations including a scanning station (34, 47, 51) including sensing means (col. 5, lines 30-41) for sensing the dimensions of the work piece (30) and processing means (94) associated with said sensing means for analyzing the sensed dimensions provided by said sensing means and providing an apparatus control instruction (col. 9, lines 1-5); a chipping station (48) downstream of said scanning station including a pair of chipping heads (48; fig. 13) mounted in laterally opposed relation on either side of said path on lateral translation means (col. 9, line 4) relative to said conveyor (36): a cutting station (fig. 13, 14) including a cutting tool (68, 123) movable relative to said transport conveyor to vary the position of the cutting tool relative to the work piece (30) being carried by said conveyor (36) past said cutting tool and along said path (col. 9, lines 2-6). Bowlin does not disclose means for independently actuating said lateral translation means. Stroud teaches in similar art, an apparatus for sawing a work piece wherein a scanner (Abstract) works in conjunction with a processing means/computer to scan a work piece and determine an optimal cut profile. Stroud teaches a pair of chipping heads (34) oppositely related on either side of a work piece transfer path (figs. 1, 2). Stroud teaches these chipping heads (34) to be controlled via the computer and positionable via linear positioner (96). Because the chipping heads are each associated with independent positioners (96), the chipping heads are independently translatable (fig. 1, 2, 13). Stroud teaches this construction so as to efficiently position the chipping heads per the optimal profile determined by the processing means/computer via the scanned data. Because the references are from a similar art and deal with a similar problem (i.e.

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positioning of the chipping heads as it relates to scanned dimensions of the work piece) it would have been obvious at the time of the invention to one having an ordinary level of skill in the art to replace, Bowlin's non-independently translatable chipping heads with chipping heads that are independently translatable so as to efficiently position the chipping heads accordingly the computer profile as taught by Stroud.

With regard to claim 10, Bowlin discloses an array of circular cutters mounted on a common shaft (123; fig. 14).

With regard to claim 11, as best as can be understood, Bowlin discloses said pivot axis located vertically below said path (fig. 14). Examiner notes two circular saw/gang saw axes, one below and one above the path of transport of the log, both axes being perpendicular to the transport path.

With regard to claims 14, 23 and 27, Bowlin does not disclose press rolls. Stroud teaches press rolls (32, 36, 40) mounted with one press roll (36) on either side of said path between said pair of chipping heads and sawing station (fig. 1). Stroud teaches this configuration so as to hold down the work piece as it is conveyed during operation and to counteract forces on the log/work piece during chipping. Stroud teaches the rolls to be laterally translatable via linear positioners (98). Accordingly, because Bowlin and Stroud disclose the work piece to be moved linearly through the chipping station, both are concerned with the problem of counter acting forces on the work piece that result from the chipping operation. As noted above, the references are from a similar art and it would have been obvious to one having ordinary skill in the art at the time of the invention to provide Bowlin with hold down rolls so as to contain the work piece and counteract forces on the work piece during chipping/cutting as taught by Stroud.

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With regard to claim 24, Bowlin discloses a gang saw (123).

Claims 12, 21, 25 and 32 as best as can be understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowlin et al. (4,879,659) in view of Stroud (4,947,909) as applied to claim 9 above, and further in view of Wislocker et al. (4,881,584). With regard to claims 12 and 25, neither Bowlin nor Stroud discloses a gang saw to be pivotally mounted. Wislocker teaches in a closely related art (fig. 1), a conveyor, chipping heads (8), press hold down roll (96) a pivotably mounted (col. 5, lines 47-53) gang saw (2). Wislocker teaches a pivotable gang saw for better placement of the saws as it relates to the work piece for efficiently cutting a cant with maximum lumber recovery (col. 1, lines 5-11). Because the references are from a similar art, it would have been obvious at the time of the invention to one having an ordinary level of skill in the art to replace Bowlin's non-pivoting gang saw mount, with a pivotably mounted gang saw for efficient placement of the saw for cutting of a cant/log as taught by Wislocker.

With regard to claims 21 and 32, as noted above, Bowlin teaches movable chipping heads and cutting tool/gang saw, the chipping heads being independently moveable as it relates to the cutting tool/gang saw.

***Allowable Subject Matter***

Claims 13 and 31 contain allowable subject matter.

Claims 15-17, 26, 28-30 and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not disclose or suggest an apparatus for sawing a work piece comprising a *simultaneous pivotable movement of said pair of chipping heads, a pair of anvils, said anvils laterally translatable or press rolls pivotally mounted for pivoting each press roll simultaneously with lateral translation* in combination with the rest of the claimed limitations as set forth in claims 13, 15-17, 26 and 31.

The prior art, Bowlin et al. (4,879,659) teaches a log/work piece processing system, wherein a scanner (34) is utilized to determine the log/work piece (30) dimensions, which are analyzed via a computer (90). Bowlin teaches that the computer controls movement of chipping heads (48), profiling heads (60) and sawing means (68, 123) so as to cut a board of optimal size without waste resulting from any initial curvature of the log/workpiece. Although, Bowlin teaches the chipping heads and sawing means to be moveable, Bowlin does not disclose the chipping heads to be pivotable as set forth in claims 13, 26 and 31.

The prior art, Raybon et al. (5,722,474,) teaches a log processing system for cutting cants into boards, wherein a scanning means (14) is used to sense the log/work piece (W), the scanning station located upstream from the log/work piece path relative to a downstream cutting tool (140, 20). Raybon further teaches, the cutting tool to encompass chipping heads (140) and a gang saw (20) such that the chipping heads are slidably mounted (col. 2, lines 63-68). The chipping head slide movements are controlled via a computer (col. 3, lines 12-14). Raybon teaches the chipping heads (140) mounted to slide (142) on rod (144) such that the rotation of the rod (144) in one direction will move the chipper heads (140) inwardly and rotation of the rod in the opposite direction will move the chipper heads (140) outwardly. Raybon also teaches the

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sawing means/gang saw (col. 1, lines 40-46) to be moveable via controls of the computer.

Raybon does not, however disclose or fairly suggest the chipping heads to be pivotable as set forth in claims 13, 26 and 31.

Stroud discloses a log processing system for cutting cants wherein a cant is scanned (26) and passed to a movable chipping means (34) and cutting head (38). The chipping means and cutting head being positionable and controlled via a computer (90) such that a profile of the cant is created and an optimal cutting profile is determined. Stroud teaches the use of press hold down rolls (32, 36, 40) for holding a log/work piece as it is conveyed to the chipping heads, (34) and cutting station (38). Stroud is silent to any chipping heads being pivotable as set forth in claims 13 and 33; anvils or such being translatable as set forth in claims 15 and 28.

Neither the prior art of record nor any combination thereof discloses the claimed invention as set forth in claims 13, 15-17, 26, 31 and 33. Accordingly the claims contain allowable subject matter.

Claims 13 and 31 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims and to correct the 35 U.S.C. 112 rejection(s).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelley Self whose telephone number is 571-272-4524. The examiner can normally be reached on 8:30 - 5:00.

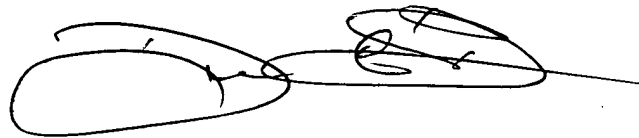
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571-272-4419. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SSelf

March 16, 2005



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